AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Previously Presented) A device for processing data recorded on an optical recording medium, comprising:

a pickup unit to detect a signal reflected from the optical recording medium, the optical recording medium including normal data formed in a marked phase and an unmarked phase, a minimum length of the marked phase or unmarked phase being 2T, T being a channel bit clock, and the normal data to be restored into original data; and

a signal processor to process the signal output from the pickup unit, thereby to output a binary signal which includes data corresponding to the minimum length.

2. (Currently Amended) ~~A~~ An optical recording medium comprising:

a recording layer; and

normal data recorded in a marked phase and an unmarked phase on the recording layer, wherein a minimum length of the marked phase is 2T, T being a channel bit clock, and the normal data to be restored into original data.

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The device of claim 1, where the signal processor includes:

a signal detector to detect a high-frequency signal reproduced from the pickup unit, to convert the high-frequency signal into a binary signal by comparing the reproduced signal with a reference signal, and to output the binary signal;

a data converter to synchronize a reference clock with the binary signal from the signal detector and to restore the binary signal from the signal detector into a bit stream using the synchronized reference clock; and

a demodulator to restore the bit stream into original data.

6. (Previously Presented) The device of claim 5, wherein the signal detector includes:

a comparator to compare the reproduced signal with at least two reference signals and to output a plurality of binary signals; and

a selector to select one of the plurality of binary signals.

7. (Cancelled)

8. (Previously Presented) A method for reproducing normal data recorded in an optical recording medium, comprising the steps of:

(a) converting a high-frequency signal reproduced from the optical recording medium into a binary signal by comparing the reproduced signal with a reference signal, the high-frequency signal including a signal corresponding to a minimum length of mark or space, the minimum length of the mark or space being 2T, T being a channel bit clock; and

(b) synchronizing a reference clock with the binary signal and restoring the binary signal into a bit stream using the synchronized reference clock, such that the normal data is restored in original data.

9. (Cancelled)

10. (Previously Presented) The method of claim 8, wherein the step (a) comprises the steps of:

(a1) comparing the reproduced signal with a plurality of reference signals and outputting a plurality of binary signals based on the comparison results; and

(a2) selecting one of the plurality of binary signals.

11. (Cancelled)

12. (Cancelled)

13. (Previously Presented) The device of claim 1, wherein the minimum length of the marked phase is shorter than a radius of a beam spot.

14. (Cancelled)

15. (Previously Presented) The recording medium of claim 2, wherein the minimum length of the marked phase is shorter than a radius of a beam spot.

16. (Previously Presented) The device of claim 1, wherein the normal data comprises data other than control data controlling how the data recorded on the optical recording medium is processed.

17. (Previously Presented) The recording medium of claim 2, wherein the normal data comprises data other than control data controlling how the data recorded on the optical recording layer is processed.

18. (Previously Presented) The method of claim 8, wherein the normal data comprises data other than control data controlling how the data recorded on the optical recording medium is processed.